THE DIFFERENTIAL DIAGNOSIS OF NEURASTHENIA.—The following is from the abstract of a paper by Dr. G. M. Beard on Neurasthenia, read before the New York Neurological Society, January 6, as given in the *N. Y. Med. Record:*

Dr. Beard regarded it important to make a differential diagnosis between neurasthenia and organic or structural disease of the brain or spinal cord. He had been frequently consulted by physicians, with reference to themselves, for symptoms which were supposed to indicate ataxia or some form of organic disease of the spine or brain, when in reality they only had symptoms of neurasthenia. Some of those medical men were greatly alarmed, and the more they read upon the subject, in German authorities, the more alarmed they were: for, in our literature, the distinction between neurasthenia and symptoms of organic trouble were not clearly made out.

Four points of differential diagnosis between neurasthenia and organic disease of the brain and spinal cord.—There were four points in the differential diagnosis of neurasthenia from organic disease:

1. The symptoms of organic disease were usually fixed and stable. Those of neurasthenia and allied states were fleeting, transient, fluctuating, metastatic, recurrent, intermittent.

2. There were certain symptoms of neurasthenia which did not usually appear in organic or structural disease. Of those mention was made of general or local itching without apparent cutaneous disease; tenderness of the teeth and gums; special idiosyncrasies with regard to food and medicine, which did not exist prior to the illness; morbid desire for stimulants and narcotics; morbid fear in its different phases; agoraphobia (fear of places); astraphobia (fear of lightning); anthrophobia (fear of men); likewise sick headache.

3. In organic disease reflex activity was usually diminished, while in functional disease reflex activity was usually increased. To that rule there were some exceptions, as in spasmodic spinal paralysis.

4. Neurasthenia and allied troubles were most likely to occur in those in whom the nervous diathesis predominated.

The characteristics of the nervous diathesis he had frequently described in other writings.

Neurasthenia was to be distinguished from hypochondriasis or pathophobia, from hysteria, and from cerebral and spinal anæmia and hyperæmia.

In neurasthenia the anæmia and hyperæmia of the brain and spinal cord were results; symptoms, temporary, intermittent, and not the disease; and it was unphilosophical to call them the disease.

The same was true with reference to oxaluria, a condition often found in neurasthenia.

The doctrine that innervation preceded circulation was a growing one among neurologists.

That point was urged in his original paper on neurasthenia. Vulpian's researches upon the physiology of sleep were in harmony with that view. Erb, in his chapter on neurasthenia, also leaned towards that view.

Neurasthenia was also to be distinguished from nervous syphilis, which it sometimes simulated in a wonderful way.

Neurasthenia also occasionally simulated in a perfect and interesting way the *symptoms of a common cold.* The chilliness, the positive coldness, the tremor, the heaviness, the soreness, the pain in the back and the limbs, and, in some cases, the excessive secretion from the eyes and nostrils — all made it hard to determine whether the patient had taken cold or not.

Over-dose of electricity. —An over-dose of electricity upon a neurasthenic patient might bring on all the symptoms of a common cold, so that the patient might suppose he had taken cold.

Neurasthenia might simulate rheumatism.

Differential diagnosis between neurasthenia and anæmia.—Neurasthenia was to be distinguished from anæmia mainly by the following symptoms:

Neurasthenia was found chiefly in connection with the nervous diathesis; the patient might be plethoric; the pulse might be full and normal; no cardiac murmurs; no pallor; was common to both sexes, but not so relatively frequent in females; was benefited by remedies which directly affected the nervous system, iron alone being of but little service; recovery was gradual, and occurred chiefly between the ages of fifty and sixty.

Anæmia, on the other hand, appeared always with the tuberculous, the rheumatic or other diathesis; was marked by increase of the watery constituents of the blood and diminution of red blood corpuscles; was found in all periods of life, from infancy to old age; was accompanied by small, weak pulse, cardiac murmurs, pallor of the face and lips, less mental depression than was present in neurasthenia; occurred relatively more frequently in females than in males; might be rapidly cured by removal of the cause, and was benefited by iron alone.

The two conditions, anæmia and neurasthenia, were sometimes associated in the same patient.

Differential diagnosis between neurasthenia and hysteria. — These two diseases were oftentimes confounded with each other. In hysteria there were usually convulsions, paroxysms, *globus hystericus*, anæsthæsia of the epiglottis, ovarian tenderness, attack of general and local anæsthesia, a certain acuteness, intensity and violence of the symptoms; was usually associated with great emotional activity; occurred most frequently in non-balanced mental organizations, and was comparatively rare in males. In the mental or psychical form it occurred with perfect physical health. Recovery might be sudden under purely emotional treatment.

In neurasthenia, on the other hand, there were no convulsions or paroxysms, no *globus hystericus*, no anæsthesia of the epiglottis; there might be ovarian tenderness — often was — but it was not so common as in hysteria; the attacks of local or general anæsthesia were not so common; the symptoms were more moderate, quiet, subdued, passive; often occurred in a well-balanced intellectual organization; very common in males; always associated with physical debility; recovery was never sudden, but always gradual.

Dr. Beard agreed with Erb that the disease needed a more systematic and careful study than it had received. It was very common, was increasing in frequency, and was the cause of a great deal of real distress. He then read

the histories of a number of cases which illustrated the symptoms mentioned. In some of these the diagnosis of ataxia had been made.

The society then adjourned.

Diagnosis of Disease of the Spinal Cord.—In the Society of Physicists and Physicians, Dresden session, February 9, this year, privy councillor Dr. Erdmann delivered a lecture on the diagnosis of disease of the spinal cord.

After some introductory remarks regarding the progress of anatomical knowledge of the diseases of the cord and its congruousness with clinical observations, the author proceeds to consider some accurately characterized groups of symptoms, from which one may diagnosticate definite diseases of the cord as to the *gait;* the author distinguishes the *paralytic* gait, which, dragging along, like that of great weariness, belongs to certain forms of chronic myelitis; further, the *atactic* gait with hesitating movements, and the well known uncertainty of patients in turning about, and, finally, the *spastic* gait, caused by reflected muscular tension.

Among other symptoms Erdmann mentions the changed condition of the *tendon-reflex*, which is increased in lateral sclerosis, and diminished in tabes, where it is at times entirely absent; further, the *trembling* during intentional movements — the so-called intention trembling; then the *disturbances of voice and deglutition*, as especially characteristic of bulbar paralysis, the atrophies of the optic nerve, diplopia, formication, especially in the ulnar region; the pain in the heel and the gastric crises to which Charcot attaches so much importance.

Complicated cases and certain transition forms produce also complicated groups of symptoms, whose significance is not so easy to determine and to explain, in which we must still have refuge in a spinal irritation, which, though not anatomically founded, nevertheless certainly does exist.

Besides *spinal pain*, which always presents as the first symptom, all other possible symptoms may occur, as in organic diseases of the spinal cord. Congestions cause pains in the region of the spinal column, which, however, do not increase with pressure upon the spinous processes; and, further, paræsthesia, anæsthesia, conditions of depression, irritation of the sexual organs, etc. — all these symptoms are aggravated in the dorsal, and diminished in the abdominal posture.

Anæmia of the spinal cord, as experimentally produced by ligation of the abdominal aorta, and as observed clinically, in consequence of embolic occlusions, is better known in its manifestations.

Leyden distinguishes three forms of spinal irritation, namely: 1—the hysteric; 2—the hypochondriac, and 3—the anæmic, to which are attached certain sub-varieties. The author observes that the difference between hysteria and spinal irritation is, in general, difficult to distinguish, and the beginning stages of disseminated sclerosis are also difficult to differentiate from hysteria. But in hysteria there is more disturbance of sensation, while in sclerosis there is more of motion. Among these motor disturbances the so-called *intention trembling* is especially to be remarked. It disappears during rest, which fact distinguishes it from paralysis agitans.